

METHOD AND APPARATUS FOR SELECTING CACHE WAYS
AVAILABLE FOR REPLACEMENT

Abstract of the Disclosure

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In a multi-way cache, a method for selecting N ways available for replacement includes providing a plurality of rulesets where each one of the plurality of rulesets specifies N ways in the cache that are available for replacement (where N is equal to or greater than zero). The method further
10 includes receiving an access address, and using at least a portion of the access address to select one of the plurality of rulesets. The selected one of the plurality of rulesets may then be used to select N ways in that cache that are available for replacement. One embodiment uses the high order bits of the access address to select a ruleset. An alternate embodiment uses at least a
15 portion of the access address and a ruleset selector control register to select the ruleset. Yet another embodiment uses the access address and address range comparators to select the ruleset.